



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/051,441	01/18/2002	Venkat Amirisetty	5181-92801	1897

7590 09/20/2005

Robert C. Kowert
Conley, Rose & Tayon, P.C.
P.O. Box 398
Austin, TX 78767

EXAMINER

LIN, WEN TAI

ART UNIT	PAPER NUMBER
----------	--------------

2154

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/051,441

Applicant(s)

AMIRISETTY ET AL.

Examiner

Wen-Tai Lin

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-88 is/are pending in the application.
- 4a) Of the above claim(s) 36-50 and 62-72 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-17 is/are allowed.
- 6) ☐ Claim(s) 18, 26, 30-35, 51, 58-61 and 73-88 is/are rejected.
- 7) ☒ Claim(s) 19-25, 27-29 and 52-57 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/1/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-88 are presented for examination. Claims 36-48 and 62-72 are temporarily withdrawn from consideration.
2. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02. The oath or declaration is defective because the priority claim to provisional application 60/286,407 appears to be erroneous. This is evidenced by the fact that (1) the first sentence in the specification shows a claim of priority to another provisional application 60/295,119 and (2) in a "Request for Corrected Official Filing Receipt", filed 2/28/2002, Applicant's representative indicated that the priority claim for provisional application 60/286,407 should be removed. Since the error was originated from Applicant's original oath or declaration, submission of a new oath or declaration with the intended priority claim is required.
3. Claims 1-17 are allowable because the prior art of record does not teach or suggest individually or in combination a method for interfacing an external system via a container-controlled connector, wherein an application sends to the container a data object specifying a high-level function and in response the container: (1) accesses metadata corresponding to the high-level function call; (2) maps the high-level function to a plurality of low-level calls (for performing the high-level function) and (3) drives the connector to make the plurality of low-

level calls to the external system, causing the external system to execute a plurality of low-level functions.

4. Applicant argues that the previous restriction requiring that claims 36-48 and 62-72 (group II) be placed in different class/subclass than that of claims 1-35, 51-61 and 73-88 (group I) is deemed to be improper because the adapter recited in claims 36 and 62 is one example of the various means recited in claim 51. Specifically, the examiner characterizes group II as having separate utility of interfacing to external systems containing different types of database objects is improper because all the independent claims in both groups read on embodiments as described in Applicant's disclosure that may interface to external system which may contain different types of objects. Thus the examiner has failed to state a proper restriction requirement.

The examiner respectfully disagrees with Applicant's argument. Applicant is reminded that groups I and II are classified in two very different classes: 319 and 707, respectively. With the former being drawn to an object-oriented messaging system for communication between objects and the latter drawn to adapting to various foreign/external objects. Although both groups I and II may have same utility in interfacing to external systems, their focuses are rather different. In the previous office action, the restriction specifically spells out that group II **"is focused on the design of an adapter ... and thus has separate utility such as interfacing to external information systems containing different types of database objects"** (enhancement added).

Take claims 36 and 51 as example. Claim 36 recites, among other things, a system having a container comprising "an adapter configured to receive ...; map ...; and drive ...," while claim

51 recites, among other things, a container comprising “means for receiving ...; means for mapping ...; and means for driving ...”. A major difference between claims 36 and 51 is that the former **configures an adapter to perform the three functions** associated with the receiving (or receive), mapping (or map) and driving (or drive) steps, as opposed to straightforwardly implementing the functions as three separate means. As for the significance of the adapter, Applicant is referred to Page 6 of the Specification under the section: “SUMMARY OF THE INVENTION”, wherein the differences between Group I (which is summarized in the first paragraph) and group II (which involves the design of metadata-aware CCI adapter and summarized in the second and third paragraphs) are clearly distinct.

Thus although groups I and II are related inventions (i.e., related as sub-combinations of one another), they are nevertheless distinctive under the criteria of MPEP § 806.05(c) - § 806.05(i) (see MPEP 808.02).

Claim Rejections – 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 73-88 are rejected under 35 U.S.C. 101 because the language of the claimed subject matter “carrier medium” has incorporated intangible “transmission media or signals such as electrical, electromagnetic, or digital signals, conveyed via a communication medium such as network and/or a wireless link” (see Specification: Page 29, lines 10-17).

6. Claims 1-17 and 51-61 are objected to because the term "the high-level function call" in claims 1, 8 and 10-11 and the term "the high-level function" in claims 51-52 and 57 lack antecedent basis.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102(a) that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

8. Claims 18, 30-33, 35, 51, 58-61, 73, 83-86 and 88 are rejected under 35 U.S.C. 102(a) as being anticipated by AAPA [Applicant Admitted Prior Art].

9. As to claim 18, AAPA teaches the invention as claimed including: a method comprising:

an application sending to a container a high-level function call corresponding to a high-level function of a system external to the application [Specification: page 2, lines 24-29; page 3, lines 24-29; e.g., by hard-coding the high-level functions in the container's connector];

the container mapping the high-level function call to a series of low-level function calls to the external system; the container driving a connector to the external system to make the series of low-level function calls to the external system [e.g., Specification: page 2, lines 18-23]; and

the external system executing the series of low-level functions as specified by the series of low-level function calls received from the connector, wherein said executing the series of low-level functions performs the high-level function of the external system corresponding to the high-level function call [Specification: page 3, lines 20-30; i.e., by hard-coding the explicitly or implicitly defined high-level functions on the connector, it is possible to provide call high-level functions of the EIS from the application server, while mapping the high-level function call to a series of low-level functions provided by J2EE CA].

10. As to claims 30-33, AAPA further teaches that the connector is a Java 2 Enterprise Edition Connector Architecture (J2EE CA) connector and the container is an application server or Java Virtual Machine (JVM -- e.g., a web server), and the external system is an Enterprise Information System (EIS) [Specification: Page 2, lines 9-16].

11. As to claim 35, AAPA further teaches that the application is tightly coupled to the container [Specification: Page 5, lines 9-12].

12. As to claim 51, since the features of this claim can also be found in claim 18, it is rejected for the same reasons set forth in the rejection of claims 18 above.

13. As to claim 58, AAPA further teaches that the container further comprises:
a different connector, wherein the different connector is configured to provide an interface between the low-level functions of the EIS and the application; and means for driving

the different connector to make the series of low-level function calls to the EIS [Specification: Page 2, lines 9-20; i.e., since a connector is a low-level protocol bridge to a specific EIS, it is clear that to interface a different EIS, the container would require a different connector].

14. As to claims 59-61, 73, 83-86 and 88, since the features of these claims can also be found in claims 18, 30-33, 35 and 51, they are rejected for the same reasons set forth in the rejection of claims 18, 30-33, 35 and 51 above.

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 26, 34, 79 and 87 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA [Applicant Admitted Prior Art], as applied to claims 18, 30-33, 35, 51, 58-61, 73, 83-86 and 88 above, further in view of Sharma et al.(hereafter "Sharma") [JSR016 : J2EE Connector Architecture Specification].

17. As to claim 26, AAPA does not specifically teach the application accesses the container in accordance with an Application Programming Interface (API) to the container. However,

Sharma teaches that the common client interface (CCI) defines a common client API for accessing EISs [e.g., Subsection 3.2 on page 10]. Thus it is obvious that the client application may access the container in accordance with an Application Programming Interface (API) to the container because Sharma is the focus of the prior art discussion.

18. As to claim 34, Sharma further teaches that the application is loosely coupled to the container [Subsection 4.3 on pages 16 and 17; e.g., when the B2B server is implemented based on J2EE, the suppliers are loosely coupled to the container].

19. As to claims 79 and 87, since the features of these claims can also be found in claims 18, 26, 34 and 73, they are rejected for the same reasons set forth in the rejection of claims 18, 26, 34 and 73 above.

20. Claim 75 is rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA [Applicant Admitted Prior Art], as applied to claims 18, 26, 30-35, 51, 58-61, 73, 79 and 83-88 above.

21. As to claim 75, AAPA does not specifically teach that the program instructions are further computer-executable to implement including metadata describing a plurality of high-level functions of the external system in a metadata repository.

However, it is well known in the art of programming to provide description information (i.e., metadata) regarding how to call or select from a list of high-level functions or provide “usage” of each such function.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide necessary metadata information for the application programmers of AAPA’s J2EE framework because the information provides the application programmers useful hints as how to call the high-level function from an application component, even though the high-level functions are hard-coded on the connector].

22. Claims 19-25, 27-29, 52-57, 74, 76-78 and 80-82 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

23. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Sharma et al. [U.S. Pat. No. 6832238]; and

Claborn et al. [U.S. Pat. No. 6708186].

24. A shortened statutory period for response to this action is set to expire 3 (three) months and 0 days from the mail date of this letter. Failure to respond within the period for response will result in ABANDONMENT of the application (see 35 U.S.C. 133, M.P.E.P. 710.02, 710.02(b)).

Conclusion

Examiner note: Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wen-Tai Lin whose telephone number is (571)272-3969. The examiner can normally be reached on Monday-Friday (8:00-5:00) .

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571)272-3964. The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

(571) 273-8300 for official communications; and

(571) 273-3969 for status inquiries draft communication.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Wen-Tai Lin

September 13, 2005

Wen-Tai Lin
9/13/05